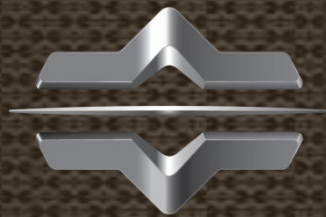


PAL-V

العرض الأول لأول سيارة تجارية طائرة في الشرق الأوسط



a joy to drive, a joy to fly



العرض الأول لأول سيارة تجارية طائرة في الشرق الأوسط

بعد النجاح في تقديم نموذج السيارة الطائرة التي ستنتجها شركة PAL-V في وقت سابق من هذا العام في معرض جنيف الدولي للسيارات (GIMS)، سوف تكون الكويت أول من يستضيف العرض الأول للسيارة الطائرة PAL-V Liberty. في 12 نوفمبر 2018 سوف تُنظّم شركة PAL-V حفل افتتاح في السفارة الهولندية بدولة الكويت. حيث سيتم عرض السيارة الطائرة على كبار الشخصيات في دُول مجلس التعاون الخليجي وعلى الجمهور العام ورجال الصحافة.

خلال المائة عام الماضية، كان الجمع بين الطيران وقيادة السيارة في آن واحد يُعدُّ خُلماً. لن يغد الأمر كذلك، عندما تنطلق السيارات الطائرة مُحلّقة في عنان السماء، ولكن متى سيحدث ذلك؟ منذ عرض السيارة الطائرة PAL-V Liberty في معرض جنيف الدولي للسيارات (GIMS)، فاق الاهتمام بها بشكل عام من قبل العملاء والمستثمرين ووسائل الإعلام كل التوقعات، وقد صنّف بعض الصحفيين المُتخصّصون في السيارات PAL-V Liberty كأفضل سيارة طائرة من نوعها. يبدو أن العالم مُتلهف لمعرفة من سينذركه التاريخ كرائد لصناعة السيارات الطائرة.

وفي الواقع إن شركة PAL-V بصدد وضع اللمسات الأخيرة في إطار خطواتها الأخيرة للحصول على شهادة اعتماد ما قبل الإنتاج: وهي مرحلة البرهنة على الامتثال للمعايير واللوائح. يقول مايك ستيكيلنبرغ (Mike Stekelenburg)، كبير مهندسي شركة PAL-V: "يتطلب الأمر الكثير من الاختبارات لإثبات أن السيارة الطائرة PAL-V Liberty تتوافق مع اللوائح". ويتابع قائلاً: "لقد عمدنا إلى اختيار تصميم وهندسة وتصنيع سيارتنا الطائرة بتقنيات مُجرّبة ثبت جدواها بدلاً من اللجوء إلى التقنيات غير الناضجة. حيث إن تقنياتنا مُتوافقة مع لوائح النقل الجوي والبري المعمول بها (مثل لوائح وكالة سلامة الطيران الأوروبية "EASA" ولوائح إدارة الطيران الفيدرالي الأمريكية "FAA"). يُركّز هذا النهج الذي نتبعه على السلامة وتحديد تاريخ تسليم واقعي وقريب للمنتج".

صرح دينجمانس (Dingemans)، المدير التنفيذي لشركة PAL-V: "إنه لمن دواعي الفخر ويُشرفني أن أكون مدعوًا من قبل السفارة الهولندية في الكويت للحضور وتقديم السيارة الطائرة PAL-V Liberty لأول مرة في الشرق الأوسط". ويُضيف قائلاً: "في السنوات الأخيرة، أعربت العديد من المؤسسات الحكومية والأفراد في المنطقة عن اهتمامهم بقدرات ومزايا السيارة الطائرة PAL-V Liberty على نحو خاص. وهذا يفتح الباب أمام شكل جديد من طرق التنقل، مما يسمح بالمزيد من الفعالية في ضبط الأمن ومراقبة الحدود وحراسة السواحل وتقديم خدمات الإسعافات الأولية".

وفقًا لدينجمانس (Dingemans)، إن الإمكانيات المُتوقّرة في دُول مجلس التعاون الخليجي تُعدُّ استثنائية. وهي المنطقة المثالية لإظهار الاستخدام مُتعدّد الجوانب للسيارة الطائرة PAL-V Liberty. وبمجرد الحصول على شهادة الاعتماد النهائية في عام 2020، سوف تُسلّم شركة PAL-V مفاتيح السيارة الطائرة PAL-V Liberty إلى أول عملائها.

وفي هذه الأثناء، يُراكم الرواد من عملاء شركة PAL-V الخبرات في مدارس الطيران حول العالم استعدادًا لتسلّمهم سياراتهم الطائرة. فبالنسبة لهم، أصبح الانتقال من مكان إلى آخر عبر سيارة طائرة يقودونها بأنفسهم أقرب من أي وقت مضى.

روبرت دينجمانس (Robert Dingemans): رقم الهاتف +31162580560 ، عنوان البريد الإلكتروني

pressinfo@PAL-V.com

Background information:

About PAL-V

PAL-V International B.V., the company that initiated the development of the PAL-V, is located in Raamsdonksveer, The Netherlands. The company was founded in 2007 to commercialize the concept developed since 1999. The management consists of a team of experienced Dutch entrepreneurs with expertise in aviation, automotive, research, and marketing. PAL-V succeeded in gathering the best talent available. Testing its "proof of concept" vehicle for driving in 2008/2009 and for flying and driving in 2011/2012 it has proven technical feasibility and certifiability within the existing regulatory framework. The company is funded by a group of professional and private investors and also received funding from the Dutch Ministry of Economic Affairs. Three Dutch ministries are supporting the project based on its technical innovation and economic potential.



Questions & Answers

Can you tell more about the engine solution?

The dual engine propulsion drive train is based on two fully certified airplane engine from Rotax, one of the leading manufacturers in aviation engines.

What about safety?

The PAL-V LIBERTY has been developed by using proven state-of-the-art technologies from the aerospace and automotive industries. In the air, the underlying gyroplane technology guarantees a stable flying platform that supports safe landing even in the very unlikely event of a total power failure. Which in itself is very unlikely thanks to its unique two engine propulsion solution.

A gyroplane as such is already a very safe way of flying. However by a rigid focus on flight safety PAL-V has taken it to the next level. By making small compromises on specification it created the safest gyroplane ever built.

Unlike most small airplanes and gyroplanes the PAL-V LIBERTY is certified under the very strict safety regime of EASA (Europe) and FAA (USA). Many countries in the world follow the same rules.

On the road, the PAL-V LIBERTY is complying with the applicable road safety requirements.

An inherent safety aspect is that in case of bad weather conditions you can drive (part of) your journey. This does make your planning much more certain but also increases your safety options dramatically.

Will regulators allow the use of PAL-Vs?

The PAL-V LIBERTY is designed within the current certification and regulations frameworks for the vast majority of countries in the world. No rules or regulations need to be changed to be allowed to use the vehicle.

What specs does it have?

Please view:

<http://www.pal-v.com/>

Why is the gyroplane concept chosen?

Safety first: in case of engine failure the gyroplane can be landed normally in a very small area equivalent to a tennis court. Landing without an engine can be done with +/- 30 km/h (18mph) ground speed on a very small spot (30 meters or 100ft). This makes emergency landing, in combination with the unique double redundant drive train of the PAL-V LIBERTY, multiple times safer than a comparable aircraft or helicopter.



Advantages compared to a conventional airplane:

Safety again: contrary to fixed-wing airplanes, it cannot stall and crosswind landings are easier and safer than with a fixed wing airplane.

Convenience and comfort: in turbulent air it still flies smoothly with excellent stability due to its high rotor speed. You will only experience 20% of the turbulence of a comparable fixed wing aircraft.

Versatility: Because a gyroplane can fly very slowly, it needs very little space to land. Take-off distance ranges from only 90m to 200m (300ft-650ft). As it deals much better with turbulence and cross wind you can safely fly a PAL-V LIBERTY while fixed wing airplanes have to stay on the ground.

Fun and effectiveness: wide speed range, with a low minimum horizontal speed (from 50 km/h up to 180 km/h or 30mph-112mph). The PAL-V LIBERTY exhibits very positive slow flight envelope characteristics, even slow glides are possible up to safe vertical descends.

Advantages compared to a helicopter:

Safety and ease of operation: a gyroplane is very easy and safe to fly because it is a stable mechanical system. A comparable helicopter is the opposite: as it is an unstable system, kept in the air by the skills of the pilot using both hand and feet. A helicopter is much harder to fly and therefore much riskier and challenging to operate.

Versatility: unlike a helicopter, a gyroplane cannot take off or land vertically. Although you may think this to be an important limitation, in practice it is NOT thanks to the driving capability of the PAL-V LIBERTY. Since you can drive the PAL-V LIBERTY to your destination, it is much more useful and versatile even than a helicopter: taking off nearby is good enough and it does not require anybody to stay behind to guard your aircraft at the landing spot. Also landing a helicopter at the spots where you would like to land is very often not allowed or possible because of noise and safety, making helicopter use in practice very cumbersome. Therefore helicopters are not as practical and useful as a PAL-V LIBERTY.

Cheaper to own and operate: a PAL-V Gyroplane has significant lower cost of ownership compared to a helicopter, yet can accomplish most missions that a helicopter can plus other ones. Since you park it in your garage costly hangar space it not required.

What happens when more PAL-Vs take to the sky?

The great news is that because PAL-V is designed within today's existing regulatory framework, all the tools are in place for safe management of transportation in the sky including 2nd Generation air traffic control. Rules and regulations are in place under the International Civil Aviation Organization (ICAO) to allow the use of the first PAL-Vs LIBERTYs.



Is it possible to take off and land everywhere?

No. Apart from the fact that this is not allowed by law, the PAL-V needs a space for take-off measuring about 90-200 by 20 meters (100ft-650ft by 60ft) without surrounding obstacles. In practice all small airstrips, aerodromes, glider sites and/or ultralight airfields will suffice. The PAL-V LIBERTY can operate from either concrete or grass airstrips. As the PAL-V popularity increases, it is expected that more and more small uncontrolled airstrips will be created. Many countries also allow for special permits on private property.

Do people need a license to fly the PAL-V?

Yes, they certainly do need a license to fly. This can be obtained through one of the many flight schools in the world. To be able to operate an airplane you will need some basic knowledge of navigation, instruments, meteorology, aerodynamics and performance. All pilots of aircraft need training and the PAL-V LIBERTY is – for the aviation aspect – no exception. To acquire a license people have to pass a theoretical exam and have a reasonable amount of training first with an instructor and later as a single pilot (solo) to learn to fly a gyroplane. The gyroplane license can usually be obtained within 30 to 40 hours of training, depending on skill and talent.

Will such a “flying car” receive certification for road and sky?

The PAL-V LIBERTY is designed within existing certification requirements on the road as well as in the sky. For flying, CS-27 (Europe) and FAR-27 (USA) are the standards on which the Type Certificate is based. For driving, the road legislation directives of the European Commission and National Highway Transportation Safety Administration (NHTSA) standards are used. The PAL-V ONE "proof of concept" prototype confirmed that the PAL-V LIBERTY can be built to meet these standards without exemptions.

Where will it be produced?

The PAL-V LIBERTY will be assembled in the Netherlands. Specific parts and systems will be manufactured by leading companies from a number of countries.

What about noise?

The noise will be comparable to a small fixed wing plane. It will be much less than a helicopter.

How long does it take to change modes?

To convert from drive to fly mode or vice versa will take 5-10 minutes.

Inquiries:

Pressinfo@pal-v.com





Press Relations

T: +31-162-580 560
Pressinfo@PAL-V.com